



**Corridor Program**

Congestion Relief & Bus Rapid Transit Projects

# **APPENDIX P8**

## **Land Surface Modification Permit- City of Kirkland**

### **I-405, SR520 to SR522 Stage 1 (Kirkland Stage 1)**

**Request For Proposal**  
**July 15, 2005**



**Washington State  
Department of Transportation**



## **FORBES LAKE MITIGATION SITES**

**LSM05-00017**

**Draft Conditions**

**July 8, 2005**

### **GENERAL CONDITIONS**

1. No work outside what is authorized under this LSM is allowed.
2. An NGPE (Natural Greenbelt Protective Easement) shall be provided on the north end of the Forster property (area to be acquired by WSDOT for mitigation purposes) and the entire Forbes Lake east mitigation site. This shall be finalized and recorded with King County prior to completion of the mitigation.
3. Structures are not allowed in wetlands or wetland buffers unless approved by the City per the Kirkland Zoning Code. This includes fences. Vegetative 'fences' or screens are allowed provided that the vegetation used is native to wetland habitat. Vegetative fences proposed in a wetland or wetland buffer shall require City approval. A site plan showing the location of the vegetative fence and the species of vegetation should be submitted to the City for review.
4. The pedestrian easement for the Forster's shall be a maximum 10' wide and shall be reflected as such on the mitigation site plan. The pedestrian easement shall only be for the use by the owners of the Forster property and is not open to the general public. Text describing the pedestrian easement shall be on the Forbes Lake west mitigation site plan.
5. Trees and shrubs shall be planted in the pedestrian trail area at a lower density than in the adjacent mitigation areas to allow for a trail to the Forbes Lake. The mitigation plan shall include a vegetated area next to the trail to help buffer the mitigation site.
6. The pedestrian trail shall not be improved meaning it will not be paved or gravel be placed on it. The pedestrian trail shall be a natural trail consistent with wetland habitat and is approved as part of the mitigation plan.
7. Details for securing the large woody debris and root wad structures to be placed on-site shall be provided with the final design by the Design-Build contractor.
8. Specifications for large woody debris or root wad minimum sizes or species shall be provided in the final design by the Design-build contractor that reflect the following: (1) Large woody debris shall be Western red cedar or Douglas-fir trees. (2) Trees shall not be hollow and shall be sound and intact. (3) Large woody debris shall be a minimum of 18" in diameter at the stem 15' from base of rootball. (4) Rootball diameter shall be 3 to 4 times the trunk diameter.

9. Willow trees on the mitigation sites should be salvaged and transplanted in the mitigation area. Even when stored in sawdust while awaiting the completion of grading, large willows have a large success rate. Willows trees that do die are still valuable as woody debris clumps.
10. All development activity and heavy equipment operation is restricted to 7:00 a.m. to 8:00 p.m. Monday through Friday, and 9:00 a.m. to 6:00 p.m. Saturday. Other restrictions on Saturday include: no working in the right-of-way, no work requiring inspection, and no trucking into or out of the site; however, light grading work on-site on Saturday is allowed. NO development activity or heavy equipment operation may occur on Sundays or the following City-observed holidays: MLK Jr. Day (3rd Monday in January) Presidents' Day (3rd Monday in February) Memorial Day (Last Monday in May) Independence Day (July 4) Labor Day (1st Monday in September) , Veterans Day (November 11) , Thanksgiving Day and day after (4th Thurs. and 4th Fri. in November) , Christmas Eve and Christmas Day (Afternoon Dec 24 and all Dec 25) , New Year's Eve and New Year's Day (Afternoon Dec 31 and all Jan 1)

### **STREAM MODIFICATION**

1. The phasing plan for the stream modification on the Forbes Lake East property shall be consistent with the requirements of HPA, NPDES, and other permit requirements.
2. The new stream channel shall be designed to accommodate flow and velocity of 100-year storm events. Information to this effect shall be provided with the Design-Build plans.
3. The design plan for the stream modification shall include the design and implementation features and techniques listed below, **unless clearly and demonstrably inappropriate for the proposed relocation or modification:**
  - a. The creation of natural meander patterns;
  - b. The formation of gentle and stable side slopes, no steeper than two feet horizontal to one-foot vertical, and the installation of both temporary and permanent erosion-control features (the use of native vegetation on stream banks shall be emphasized);
  - c. The creation of a narrow sub-channel (thalweg) against the south or west stream bank;
  - d. The utilization of native materials;
  - e. The installation of vegetation normally associated with streams, emphasizing native plants with high food and cover value for fish and wildlife;
  - f. The creation of spawning areas, as appropriate;
  - g. The re-establishment of fish population, as appropriate;
  - h. The restoration of water flow characteristics compatible with fish habitat areas;
  - i. Demonstration that the flow and velocity of the stream after relocation or modification shall not be increased or decreased at the points where the stream enters and leaves the subject property, unless the change has been approved by

the Planning Official to improve fish and wildlife habitat or to improve storm water management; and

- j. A written description of how the proposed relocation or modification of the stream will significantly improve water quality, conveyance, fish and wildlife habitat, wetland recharge (if hydrologically connected to a wetland), and storm water detention capabilities of the stream.
4. Prior to diverting water into a new stream channel, a qualified professional approved by the Planning Official (Adolfson and Associates is okay to use) shall inspect the completed new channel and issue a written report to the Planning Official stating that the new stream channel complies with items listed in #12, a-j above. The cost for this inspection and report shall be borne by the applicant. The report shall be reviewed by the Planning and Public Works Departments for consistency with the above listed items.

#### **MITIGATION SITE INPSECTIONS**

1. Inspection of the mitigation sites by the City's Wetland and Stream consultant, The Watershed Company, will occur 2 years and 8 years after completion of the mitigation plan.
2. Provide annual reports to the City's Parks (Jennifer Schroder, Director) and Planning Departments (Jon Regala, Associate Planner). This annual report should depict the baseline condition including at a minimum field pictures of how the area is re-vegetated, success rates of planting, and the appearance of any invasive material on the site. Annual report must also meet the content requirements of Kirkland Zoning Code 90.55.



PERMIT NO.: LSM05-00017

DATE: 07/08/2005

**PERMIT CONDITIONS AS FOLLOWS:**

- 1) \*BLDG. DEPT. CONDITIONS - Contact Tom Radford PH# 425-587-3600\*
  - 2) Demolition permit(s) required for removal of existing structures. Ref.: KMC 21.06.205
  - 3) Building permits are required for retaining walls or detention vaults on non-right of way property.
  - 4) \*\*\*\*\*PUBLIC WORKS CONDITIONS - PH# 425-587-3800\*\*\*\*\* All work associated with this project, including street improvements and utility connections, must meet the City of Kirkland Public Works Pre-Approved Plans and Policies Manual. The Manual can be purchased from the Public Works Department, or reviewed at the public counter during normal business hours.
  - 5) The developer/contractor must call the Public Works Construction Inspector, Tom Chriest, at 425-587-3847, prior to 6:00 a.m. for same-day inspections. Calls received after 6:00 a.m. will go to the inspector's voice mail for next-day inspections.
  - 6) Construction drainage control shall be maintained by the developer and subject to periodic inspections. During the period from May 1 to September 30, all denuded soils must be covered within 7 days; between October 1 and April 30, all denuded soils must be covered within 12 hours. If an erosion problem is already existing on the site, other cover protection and erosion will be required.
  - 7) Any public improvements damaged during construction shall be replaced prior to final inspection.
  - 8) Contractor is responsible for keeping streets and/or storm drains clean at all times from mud and debris.
  - 9) Erosion control measures determined and approved by the Public Works Department must be installed prior to the commencement of any construction. Erosion control must be provided along the site perimeter for adjacent properties and will include protection of all storm drainage systems, appurtenances, and watersheds. Protection must also be provided for adjacent public right-of-ways and systems contained therein. For additional information on materials and procedures, consult the Public Works Department Pre-Approved Plans and Policies Manual. For same-day inspections, call the Public Works inspection line at 425-587-3805 by 6:00 A.M.
  - 10) In addition to the mandatory TESC materials installed at the time of grading, the owner/contractor shall stockpile the following materials prior to work startup:
    - minimum of 6 straw bales, and 6 additional bales per additional acre disturbed.
    - minimum 75 feet of filter fabric, and 75 feet per additional disturbed acre
    - minimum of 15 silt fence stakes, and 15 stakes per additional disturbed acre
- This material must be protected from the elements and readily available to the contractor, if installation of emergency erosion control measures become necessary. Also, if any of the stockpiled materials are used, they shall be replaced within 2 days.
- 11) Preconstruction meeting is required prior to construction. Please call John Burkhalter at 425.587.3846 to set up the meeting.